

De-Rocking Takes DPW / DEH Teamwork

Taking rocks out of a flood control culvert shouldn't be any big deal. You grab a couple of shovels, a wheelbarrow or two and the crew goes to work. Unless, of course, that culvert is enclosed, 750 feet long and the rocks are really boulders.

That was the scenario faced by Jim Torres and the Flood Control crew and Mark Lumpkins and the Division I Stormwater crew. They knew they needed a skip loader to move the large rocks but, with the size of this Spring Valley box culvert, carbon monoxide gas from the machine's exhaust could be a major problem.

Enter DPW Safety Officer Carl Spiron and Environmental Health's (DEH) Dan Tappen, an industrial hygienist. Putting their heads together, Spiron and Tappen came up with a plan to seal off all the interior inlets in the box and use a giant fan to pull air through the long culvert to evacuate unwanted gases.



Jerry Cope monitors fan as Nathan Wright pushes rocks with small loader during culvert clean up.



Environmental Health's Dan Tappen checks air flow during box culvert rock clean up in Spring Valley.

Tappen constantly checked air flow and quality during the project, ensuring the levels of hazardous gas remained within an acceptable range.

"Carbon monoxide can be lethal," Spiron said. "We brought Dan in because he's the expert in this area and can help us provide

a safer work environment for our crews."

Both *intra-* and *inter-*department cooperation were needed. Sections from the

Transportation, Land Development and Management Services divisions worked with DEH's Tappen.

Because the culvert is barely six feet high, crews had to use a special lower profile loader to move rocks weighing several hundred pounds.

The concrete channel that feeds the culvert carries a significant amount of runoff water through residential and commercial properties during storms. Removing the rocks will improve water flow through the channel during heavy rains.

Kid's Work Goes to the Movies

Matt Prendergast and Laurissa Lane are coming to a movie theater near you. They won't be on the screen, but their art work will.

Prendergast and Lane, students at Flying Hills Elementary School in El Cajon, are winners in Recycling's art contest for oil recycling. Their work is part of advertisements shown in local movie houses before the films begin. For their efforts, the duo received free theater passes so they can see their efforts on the silver screen.

The project is part of DPW's Recycling program.



Art by Laurissa Lane



Art by Matt Prendergast

Why Safety Classes:

By Carl Spiron, Safety Officer

Vision is a complex sense composed of many elements. The human eye, elegant in its detail and design, represents the gateway to the process we call vision.

At DPW, many of our staff are in the field chipping, grinding, sweeping, and using compressors to blow debris out of concrete boxes and culverts. Also, engineers, lab technicians, office staff, are exposed to potential eye injury.

So what's so special about the eye? The eye is about one inch across and is covered by protective tissue called the Sclera. Six muscles that attach to various points on the sclera control the eye. The cornea, retina, pupil, iris, and lens are involved in the process of letting in of light and color to the eye. The light passes through the vitreous humor, a clear jelly-like substance, and comes into contact with the rod cells and cone cells. Several million rod and cone cells are involved. The retina takes the electrical impulses and transports them down the optic nerve to the brain, where they are interpreted by the primary visual cortex.

Believe it or not, this is a very simple description. And even a minor injury can impact you greatly. Even if you're just out visiting a project, wear safety goggles.

Think of eye protection whenever you are near dust or debris. Many times in training I have explained about the eye, how it works, and why it is so important to protect them. Safety starts with you being observant and helping others who just don't see the big picture.

The 5-Step Approach for Improving Employee Performance

By Kirsten Aaboe-Hope, Training Officer

We are all leaders in one form or another, whether we formally lead a section, supervise a student worker, provide leadership in an area we know well to other employees, or act as a project lead on a periodic basis. Employees who don't know how to do a job don't do a good job. Continual, supportive interaction is vital to helping others perform in a way that meets the objectives of whatever project you may be involved with and need help from others to complete. It is part of a leader's responsibility to help people learn to do a job well. The following process is a helpful tool in this effort.

DESCRIBE clearly what needs to be done, what the objective is. Describe how to do a task if someone clearly doesn't know and performance details are important to you. Let them know as well how their responsibilities in completing this task fit into the bigger picture. People cannot be expected to perform at a high level without this information.

SHOW them what the final product should look like. This sets your performance standard – it determines the quality of the product. Besides telling them, show them how the task is to be performed if they don't already know.

LET THEM TRY. Unless you or someone else does the task for them, they must try and fail if necessary. This is a risk; it requires that the learner assume some responsibility for the result and for improvement.

MANAGE THE CONSEQUENCES – MONITOR PERFORMANCE. Monitor performance as closely as needed to reduce the risk to acceptable levels. Risks include physical danger, loss of funds or public image, wasted time, potential embarrassment, lost opportunity, etc.

MANAGE THE CONSEQUENCES – PROVIDE FEEDBACK. Deliver feedback in a way that helps people understand what they did really well, and also to try again and to do the task better next time. The most important rules for providing feedback are:

- Provide your feedback with caring.

- Provide it as soon after the event as practical.

- Be honest and specific to the behaviors involved. Be non-judgmental.

- Provide both positive and negative feedback in a supportive framework. The positive feedback should reinforce the standard (see step #2). Studies show that positive reinforcement influences behavior change more and is remembered longer than "constructive criticism."

Frequent and skillful use of this 5-step process should greatly enhance performance. Try using it the next time you need help from another person.

Division News

Land Development

Hydrology Manual Goes On Line

For years, when developers and engineers wanted a copy of San Diego County's *Hydrology Manual*, they climbed in their car, drove to Kearny Mesa and spent a few dollars to buy a book. Customers no longer have to do that.

Now the 322 page document is available on the DPW web site at www.sdcountry.ca.gov/dpw/engineer/hydrologymanual.html. Developers, engineers and others who want to learn about flood flow, drainage report requirements and other information are just a couple clicks away.

Gillespie Salutes the Troops

It's time to say "thanks" to San Diego's military service men and women, and what better way than with "Fleet Week San Diego." County Airports is showing the County's appreciation by hosting the fifth annual "Troop Salute," at Gillespie Field.

Designed to educate and entertain thousands, "Troop Salute" features military fly-bys, static and interactive aircraft displays, children's games, live music, dancing, food booths and cultural exhibits. Visitors can also check out the Family Fun Boot Camp Challenge, aircraft demonstrations and a fabulous fireworks extravaganza.

Set for Saturday, October 11, the event is free and will run from noon until 8 p.m.

"This year we've added some exciting new elements," said Lee Ann Lardy, Senior Real Property Agent.

Lardy, along with Airport Manager Noreen Crane and Airport Operations Coordinator Jeremy Keating served on the "Troop Salute" planning committee.

New are the D.A.R.E. Classic Car Show, exhibits celebrating 100 Years of Powered Flight and a military personnel job fair, hosted by Workforce Partnership.

"Our goal in joining the committee was to ensure a safe event that reflects well on County Airports," said Lardy. "We're ready and excited for this year's event."

For more information about "Troop Salute," or call Crane at (619) 956-4800 or the event's web site at <http://www.fleetweeksandiego.org>.

Engineering Services

Taking Projects to the People

Is someone planning to work in the area where your project is scheduled? Why is that crew digging up the road near your office?

Answers to these and other questions are on line and available to DPW staff. Soon they'll be available to the general public. That's because the department's Roadway Project Alert System (RPAS) debuted last month.

RPAS uses satellite images overlaid with graphics and maps that show all roads in the County. When an applicant pulls a permit for work, data is entered and the project is displayed through your web browser. Available information includes capital improvement, road maintenance and private project permits. Its purpose is to provide a visual reference for those planning work projects that could impact roads, so they can better synchronize work and minimize traffic impacts to communities.